

In the Claims:We claim:

1. (currently amended) ~~Self-adhesive~~ A self-adhesive, flexible sealing tape comprising at least one flexible, self-adhesive core or at least one flexible, self-adhesive carrier layer provided with an envelope or two-sided coating ~~consisting of~~ comprising a second adhesive system, ~~characterized in that~~ wherein the envelope/coating ~~consists of~~ comprises an expanded pressure-sensitive adhesive tape, and that the material for the core/the carrier layer is selected from the group ~~consisting of~~ comprising thermoplastic rubbers on the basis of styrene-isoprene-styrene block copolymers, [[or]] styrene-butadiene-styrene block copolymers, copolymers of vinyl acetate, polyisobutylenes and acrylates which have been cross-linked by a process selected from the group consisting of either thermally or by means of and UV irradiation.
2. (currently amended) ~~Sealing~~ The sealing tape according to claim 1, ~~characterised in that~~ wherein the material for the core/the carrier layer has a glass transition temperature (Tg) of below 0 °C.
3. (currently amended) ~~Sealing~~ The sealing tape according to claim 1, wherein ~~or 2, characterised in that~~ the pressure-sensitive adhesive tape is based on a pure dispersion acrylate.
4. (currently amended) ~~Sealing~~ The sealing tape according to claim 3, wherein ~~characterised in that~~ the pure dispersion acrylate is based on plasticizing monomers selected from the group consisting of 2-ethylhexyl acrylate, 1-butyl acrylate and n-butyl acrylate.
5. (currently amended) ~~Sealing~~ The sealing tape according to claim 1, ~~characterised in that~~ wherein the pressure-sensitive adhesive tape ~~consists of~~ comprises an adhesive based on a material selected from the group consisting of vinyl isobutyl ether [[or]] and isobutene.
6. (currently amended) ~~Sealing~~ The sealing tape according to claim 1, wherein ~~any one of the preceding claims, characterised in that~~ the thickness of the core/the carrier layer is between 0.1 mm and 8 mm, ~~especially preferably between 1 mm and 5 mm.~~
7. (currently amended) ~~Sealing~~ The sealing tape according to claim 1, wherein ~~any one of the preceding claims, characterised in that~~ the width of the core/the carrier layer is between 1 mm and 10 mm.

8. (currently amended) ~~Sealing~~ The sealing tape according to claim 1, wherein any one of the preceding claims, characterised in that the thickness of the envelope/coating is between 0.2 and 1.5 mm, especially preferably between 0.5 mm and 1 mm.

9. (currently amended) ~~Sealing~~ The sealing tape according to claim 1, wherein any one of the preceding claims, characterised in that the envelope/coating has a foam-like structure.

10. (currently amended) ~~Sealing~~ The sealing tape according to claim 1, wherein any one of the preceding claims, characterised in that the sealing tape is equipped with reinforcing elements which stabilise the sealing tape, particularly in the longitudinal direction.

11. (currently amended) ~~Sealing~~ The sealing tape according to claim 1, wherein any one of the preceding claims, characterised in that the reinforcing element is selected from the group consisting of threads, nonwovens or interlaid scrims, wovens, [[and]] knitted fabrics and [[or]] crocheted fabrics.

12. (currently amended) ~~Process~~ A process for the manufacture of a self-adhesive, flexible sealing tape comprising at least one flexible, self-adhesive core or at least one flexible, self-adhesive carrier layer provided with an envelope or two-sided coating ~~consisting of including~~ a second adhesive system, characterised in that comprising the steps of:

~~manufacturing~~ the core/carrier layer and the envelope/coatings are manufactured in independent processes as web-like materials[[],]];

~~and that subsequently advancing~~ two pre-fabricated pressure-sensitive adhesive tapes, one per side, are advanced towards a web consisting of the elastic core material/carrier layer material[[],]]; and

~~applying pressure to combined said pre-fabricated tapes with said web are combined therewith by application of pressure.~~

13. (currently amended) ~~Process~~ The process according to claim 12, characterised in that for the manufacture of the expanded pressure-sensitive adhesive tape ~~further comprising the step of producing~~ an aqueous dispersion of the pressure-sensitive adhesive is produced which and contains containing a filler consisting of comprising small, thermoplastic hollow plastic spheres of plastic which are filled with hydrocarbon gas, said hollow spheres expanding upon exposure to a temperature in the range between 70 °C and 140 °C[[],]]; and that ~~processing~~ the dispersion is processed

expanded.

14. (currently amended) Use of a sealing tape according to any one of claims claim 1 [[to 11,]] for adhesively bonding vapour barrier films or vapour retarder films, especially for by adhesively bonding said films to walls.

15. (new) The sealing tape according to claim 6, wherein the thickness of the core/the carrier layer is between 1 mm and 5 mm.

16. (new) The sealing tape according to claim 8, wherein the thickness of the envelope/coating is between 0.5 mm and 1 mm.